

amount less than \$250,000, (g) suffered any extraordinary losses or waived any rights of material value other than in the ordinary course of business, (h) made any capital expenditures or commitments therefor other than in the ordinary course of business or in an amount less than \$250,000, (i) entered into any other transaction other than in the ordinary course of business in an amount less than \$250,000 or entered into any material transaction, whether or not in the ordinary course of business, (j) made any charitable contributions or pledges, (k) suffered any damages, destruction or casualty loss, whether or not covered by insurance, affecting any of the properties or assets of the Company or any other properties or assets of the Company which could, individually or in the aggregate, have or result in a Material Adverse Effect, (l) made any material change in the nature or operations of the business of the Company, (m) participated in any transaction that would have a Material Adverse Effect or otherwise acted outside the ordinary course of business, (n) the Company has not increased the compensation of any of its officers or the rate of pay of any of its employees, except as part of regular compensation increases in the ordinary course of business, (o) subject to the planned restatement of certain quarterly reports in fiscal year 2001 as disclosed by the Company in the press release announcing its fiscal year 2001 results, effected any material change in the accounting principles or practice of the Company except as required by reason of a change in GAAP or (p) entered into any agreement or commitment to do any of the foregoing.

6.7 NO CONFLICT; GOVERNMENTAL CONSENTS. (a) The execution and delivery by the Company of this Agreement, the Registration Rights Agreement and the Warrant and the consummation of the transactions contemplated hereby and thereby will not (i) result in the violation of any provision of the Certificate of Incorporation or By-laws or other organizational documents of the Company, (ii) result in any violation of any law, statute, rule, regulation, order, writ, injunction, judgment or decree of any court or Governmental Authority to or by which the Company is bound, or (iii) conflict with, or result in a breach or violation of, any of the terms or provisions of, or constitute (with due notice or lapse of time or both) a default under, any bond, debenture, note or other evidence of indebtedness, or any material lease, contract, indenture, mortgage, deed of trust, loan agreement, joint venture or other agreement or instrument to which the Company is a party or by which it or its property is bound, nor result in the creation or imposition of any Lien upon any of the properties or assets of the Company, except for, in the case of clauses (ii) and (iii) of this subsection 6.7(a), any violation, conflict, breach or default which would not have a Material Adverse Effect.

(b) No material consent, approval, license, permit, order or authorization of, or registration, declaration or filing with, any court, administrative agency or commission or other Governmental Authority or Person, and no lapse of any waiting period under any Requirements of Law, remains to be obtained (or lapsed) or is otherwise required to be obtained by the Company in connection with the authorization, execution and delivery of this Agreement, the Registration Rights Agreement and the Warrant or the consummation of the transactions contemplated hereby or thereby, including, without limitation the issue and sale of the Securities and the shares of Common Stock underlying such Securities, except filings as may be required to be made by the Company after each Closing with (i) the Commission, (ii) the National Association of Securities Dealers, Inc. ("NASD"), (iii) the Nasdaq Stock Market, Inc. and (iv) state blue sky or other securities regulatory authorities. For purposes of this Agreement, "REQUIREMENTS OF LAW" means, as to any Person, any law, statute, treaty, rule, regulation, right, privilege, qualification, license or franchise or determination of an arbitrator or a court or other government of any nation, state, city, locality or other political subdivision thereof, any entity exercising executive, legislative, judicial, regulatory or administrative functions of or pertaining to government, and any corporation or other entity owned or controlled, through stock or capital ownership or otherwise, by any of the foregoing (each, a "GOVERNMENTAL AUTHORITY") or stock exchange, in each case applicable or binding upon such Person or any of its property or to which such Person or any of its property is subject or pertaining to any or all of the transactions contemplated or referred to herein.

6.8 LITIGATION. Except as set forth in the Commission Documents, there are no claims, actions, suits, investigations or proceedings pending or, to the Company's knowledge, threatened proceedings against the Company or its respective assets, at law or in equity, by or before any Governmental Authority, or by or on behalf of any third party, except for any claim, action, suit, investigation or proceeding which would not have a Material Adverse Effect nor does the Company have knowledge that there is any reasonable basis for any of the foregoing. There are no claims, actions, suits, investigations or proceedings pending or, to the Company's knowledge, threatened proceedings against the Company contesting the right of the Company to use, sell, import, license, or make available to any Person any of the Company's products or services currently or previously sold, offered, licensed or made available to any Person or used by the Company or opposing or attempting to cancel any of the Company's Intellectual Property rights, except for any claim, action, suit, investigation or proceeding which would not have a Material Adverse Effect.

6.9 COMPLIANCE WITH LAWS; NO DEFAULT OR VIOLATION; CONTRACTS. The Company is in compliance in all material respects with all Requirements of Law and all orders issued by any court or Governmental Authority against the Company in all material respects. To the Company's knowledge, there is no existing or currently proposed Requirement of Law which could reasonably be expected to prohibit or restrict the Company from, or otherwise materially adversely affect the Company in, conducting its business in any jurisdiction in which it now conducts or proposes to conduct such business. The Company has all material licenses, permits and approvals of any Governmental Authority (collectively, "PERMITS") that are necessary for the conduct of the business of the Company; (ii) such Permits are in full force and effect; and (iii) no violations are or have been recorded in respect of any Permit. No material expenditure is presently required by the Company to comply with any existing Requirements of Law or order. Except as would not be reasonably expected to have a Material Adverse Effect, the Company is not (i) in default under or in violation of any indenture, loan or credit agreement or any other agreement or instrument to which it is a party of by which it or any of its properties is bound or (ii) in violation of any order, decree or judgment of any court, arbitrator or other Governmental Authority. The contracts described in the Commission Documents or incorporated by reference therein that are material to the Company (collectively, the "CONTRACTUAL OBLIGATIONS") are in full force and effect on the date hereof, and neither the Company nor, to the Company's knowledge, any other party to such contracts is in breach of or default under any of such contracts nor, to the Company's knowledge, does any condition exist that with notice or lapse of time or both would constitute a default by such other party thereunder. The Company has not received notice of a default and is not in default under, or with respect to, any Contractual Obligation nor, to the Company's knowledge, does any condition exist that with notice or lapse of time or both would constitute a default thereunder. All of such Contractual Obligations are valid, subsisting, in full force and effect and binding upon the Company and, to the Company's knowledge, the other parties thereto, and the Company has paid in full or accrued all amounts due thereunder and has satisfied in full or provided for all of its liabilities and obligations thereunder. Without limiting the foregoing, the Company has provided to the Purchasers true and correct copies, as in effect on the date hereof, of that certain (i) Co-Development Agreement (including all amendments, waivers, consents and other documents relating thereto), dated August 31, 1998, among the Company and Southern Research Institute, and (ii) Co-Development Agreement (including all amendments, waivers, consents and other documents relating thereto), March 12, 2001, among the Company and Ilex (collectively, the "CO-DEVELOPMENT AGREEMENTS"), and there exists no violation, breach, event of default or event that, but for the giving of notice or the lapse of time or both, would constitute an event of default thereunder, and the Company has no knowledge that any Person is terminating or may seek to terminate or challenge the terms of, or rights set forth in, either of the Co-Development Agreements.

6.10 INSURANCE. The Company maintains and will continue to maintain insurance of the types and in the amounts that the Company reasonably believes is adequate for its business, including, but not

limited to, insurance covering all real and personal property owned or leased by the Company against theft, damage, destruction, acts of vandalism and all other risks customarily insured against by similarly situated companies, all of which insurance is in full force and effect.

6.11 ENVIRONMENTAL MATTERS. The Company is in compliance, in all material respects, with all applicable Environmental Laws. There is no civil, criminal or administrative judgment, action, suit, demand, claim, hearing, notice of violation, investigation, proceeding, notice or demand letter pending or, to the Company's knowledge, threatened against the Company pursuant to Environmental Laws. To the Company's knowledge, there are no past or present events, conditions, circumstances, activities, practices, incidents, agreements, actions or plans which could reasonably be expected to prevent compliance with, or which have given rise to or will give rise to liability which would have a Material Adverse Effect, under Environmental Laws. For purposes of the foregoing, "ENVIRONMENTAL LAWS" means federal, state, local and foreign laws, principles of common laws, civil laws, regulations, and codes, as well as orders, decrees, judgments or injunctions, issued, promulgated, approved or entered thereunder relating to pollution, protection of the environment or public health and safety.

6.12 TAXES. The Company has paid or caused to be paid, or has established reserves in accordance with GAAP for all Tax liabilities applicable to the Company for all fiscal years that have not been examined and reported on by the taxing authorities (or closed by applicable statutes). No additional Tax assessment against the Company has been heretofore proposed or, to the Company's knowledge, threatened by any Governmental Authority for which provision has not been made on its balance sheet.

No tax audit is currently in progress and there is no unassessed deficiency proposed or, to the Company's knowledge, threatened against the Company. The Company has no knowledge of any change in the rates or basis of assessment of any Tax (other than federal income tax), of the Company which would reasonably be expected to have a Material Adverse Effect. The Company has not agreed to or is required to make any adjustments under section 481 of the Code by reason of a change of accounting method or otherwise. None of the assets of the Company is required to be treated as being owned by any Person, other than the Company or any of its subsidiaries, pursuant to the "safe harbor" leasing provisions of Section 168(f)(8) of the Code. The company is not a "United States real property holding corporation" (a "USRPHC") as that term is defined in Section 897(c)(2) of the Code and the regulations promulgated thereunder.

For purposes of this Agreement, "CODE" means the Internal Revenue Code of 1986, as amended, and "TAXES" means any federal, state, provincial, county, local, foreign and other taxes (including, without limitation, income, profits, windfall profits, alternative, minimum, accumulated earnings, personal holding company, capital stock, premium, estimated, excise, sales, use, occupancy, gross receipts, franchise, ad valorem, severance, capital levy, production, transfer, withholding, employment, unemployment compensation, payroll and property taxes, import duties and other governmental charges and assessments), whether or not measured in whole or in part by net income, and including deficiencies, interest, additions to tax or interest, and penalties with respect thereto, and including expenses associated with contesting any proposed adjustments related to any of the foregoing.

6.13 INTELLECTUAL PROPERTY.

(a) "INTELLECTUAL PROPERTY" shall mean all of the following as they are necessary in connection with the business of the Company as presently conducted and as they exist in all jurisdictions throughout the world, in each case, to the extent owned by or licensed to the Company: (i) patents, patent applications and inventions, designs and improvements described and claimed therein, patentable inventions and other patent rights (including any divisions, continuations, continuations-in-part, reissues,

reexaminations, or interferences thereof, whether or not patents are issued on any such applications and whether or not any such applications are modified, withdrawn, or resubmitted) ("PATENTS"); (ii) trademarks, service marks, trade dress, trade names, brand names, designs, logos, or corporate names, whether registered or unregistered, and all registrations and applications for registration thereof ("TRADEMARKS"); (iii) copyrights and mask works, including all renewals and extensions thereof, copyright registrations and applications for registration thereof, and non-registered copyrights ("COPYRIGHTS"); (iv) trade secrets, inventions, know-how, process technology, databases, confidential business information, customer lists, technical data and other proprietary information and rights ("TRADE Secrets"); (v) computer software programs, including, without limitation, all source code, object code, and documentation related thereto ("SOFTWARE"); (vi) Internet addresses, domain names, web sites, web pages and similar rights and items ("INTERNET ASSETS"); and (vii) all licenses, sublicenses and other agreements or permissions including the right to receive royalties, or any other consideration related to the property described in (i)-(vi). The Intellectual Property contains all of the intellectual property necessary to operate the business of the Company as currently conducted.

(b) The Company exclusively owns (or otherwise has the right to use the Intellectual Property pursuant to a valid license, sublicense or other agreement), free and clear of all Liens, and has the unrestricted right (subject to any such license terms, if applicable) to use, sell, license, or sublicense all Intellectual Property.

(c) SCHEDULE 6.13(C) sets forth all issued Patents, registrations, filings and applications for any Patents, Trademarks and Copyrights filed by the Company, specifying as to each item, as applicable: the title; the jurisdiction(s) in which the item is issued or registered or in which an application for issuance or registration has been filed; and the issuance, registration, or application numbers and dates.

(d) SCHEDULE 6.13(D) sets forth all material licenses, sublicenses, distributor agreements and other agreements or permissions ("IP LICENSES") under which the Company is a (i) licensor, or (ii) licensee, distributor, or reseller, except such licenses, sublicenses and other agreements relating to off-the-shelf software which is commercially available on a retail basis for less than \$200 per license and \$5,000 in the aggregate and used solely on the computers of the Company ("OFF-THE-SHELF SOFTWARE"). To the knowledge of the Company, all of the IP Licenses are valid, enforceable, and in full force and effect, and, with respect to the Company, will continue to be on identical terms immediately following the completion of the transactions contemplated by this Agreement.

(e) All products made, used or sold by the Company under the Patents have been marked with the proper patent notice.

(f) All products and materials made, used or sold by the Company containing Trademarks bear the proper federal registration notice where permitted by law.

(g) All works encompassed by the Copyrights and used by the Company have been marked with the proper copyright notice.

(h) To the Company's knowledge, upon reasonable inquiry in accordance with sound business practice and business judgment, all the Company's Intellectual Property rights are valid and enforceable. The Company has taken all reasonably necessary actions to maintain and protect each item of Intellectual Property owned by the Company.

(i) The Company has taken all reasonable precautions to protect the secrecy, confidentiality, and value of its Trade Secrets and the proprietary nature and value of its Intellectual Property. To the best

of the Company's knowledge, none of the Trade Secrets, wherever located, the value of which is contingent upon maintenance of confidentiality thereof, have been disclosed to any employee, representative or agent of the Company or any other person not obligated to maintain such Trade Secret in confidence pursuant to a confidentiality agreement entered into with the Company, except as required pursuant to the filing of a patent application by the Company.

(j) The Company is diligently prosecuting all Patent applications it has filed, as instructed by patent counsel. The Company is diligently filing and preparing to file Patent applications for all inventions in a manner and within a sufficient time period to avoid statutory disqualification of any potential Patent application.

(k) Each present or past employee, officer, consultant or any other person who developed any part of any Company product or any Intellectual Property that is or will be made, used or sold by the Company has executed a valid and enforceable Confidentiality Agreement with the Company.

(l) Unless otherwise disclosed by the Company or pursuant to a current license, it is not necessary for the Company's business to use any Intellectual Property owned by any present or past director, officer, employee or consultant of the Company (or persons the Company presently intends to hire). Except as set forth on SCHEDULE 6.13(L), to the knowledge of the Company, at no time during the conception or reduction to practice of any of the Company's Intellectual Property was any developer, inventor or other contributor to such Intellectual Property operating under any grants from any Governmental Authority or subject to any employment agreement, invention and assignment, nondisclosure agreement or other Contractual Obligation with any Person that could adversely affect the Company's rights to its Intellectual Property.

(m) To the knowledge of the Company, upon reasonable inquiry in accordance with sound business practice and business judgment, none of the Intellectual Property, products or services owned, used, developed, provided, sold or licensed by the Company, or made for, used or sold by or licensed to the Company by any person infringes upon or otherwise violates any Intellectual Property rights of others.

(n) To the knowledge of the Company, upon reasonable inquiry in accordance with sound business practice and business judgment, no Person is infringing upon or otherwise violating the Intellectual Property rights of the Company.

6.14 EMPLOYEE BENEFIT PLANS.

(a) Neither the Company nor any entity which is or was under common control within the meaning of Section 414(b), (c), (m) or (o) of the Code maintains or contributes to, or has within the preceding six years maintained or contributed to, or may have any liability with respect to any employee benefit plan subject to Title IV of Employee Retirement Income Security Act of 1974, as amended ("ERISA"), or Section 412 of the Code or any "multiple employer plan" within the meaning of the Code or ERISA. Each employee benefit plan, arrangement, policy, program, agreement or commitment which the Company maintains, contributes to or may have any liability in respect to (each, a "PLAN") has been established and administered in accordance with its terms, and complies in form and in operation with the applicable requirements of ERISA, the Code and other applicable Requirements of Law. No claim with respect to the administration or the investment of the assets of any Plan (other than routine claims for benefits) is pending. No event has occurred in connection with which the Company or any Plan, directly or indirectly, could be subject to any material liability under ERISA, the Code or any other law, regulation or governmental order applicable to any Plan, or under any agreement, instrument, statute, rule

of law or regulation pursuant to or under which the Company has agreed to indemnify any person against liability incurred under, or for a violation or failure to satisfy the requirement of, any such statute, regulation or order. The Company has no liability, whether absolute or contingent, including any obligations under any Plan, with respect to any misclassification of any person as an independent contractor rather than as an employee.

(b) The Company does not have any obligations to provide or any direct or indirect liability, whether contingent or otherwise, with respect to the provision of health or death benefits to or in respect of any former employee, except as may be required pursuant to Section 4980B of the Code and the corresponding provisions of ERISA and the cost of which are fully paid by such former employees.

(c) There are no unfunded obligations under any Plan which are not fully reflected on the Financial Statements.

6.15 FDA MATTERS. After due investigation, (i) the Company currently has no reasonable basis to believe that any Governmental Authority, including, but not limited to, the United States Food and Drug Administration (the "FDA"), will ultimately prohibit the marketing, sale, license or use in the United States or elsewhere of any product developed, produced or marketed by the Company or with third parties (including, without limitation, Ilex) (each, a "PRODUCT"), (ii) the Company knows of no product or process which the FDA has prohibited from being marketed or used in the United States which in function and composition is substantially similar to any Product, (iii) the Company has no Product on clinical hold nor any reason to expect that any Product is likely to be placed on clinical hold, (iv) the Company has disclosed to the Purchaser all submissions to the FDA made by the Company and the FDA responses (and other material correspondence received from or submitted to the FDA by the Company), including, but not limited to, all FDA warning letters, regulatory letters and notice of adverse finding letters and the relevant responses, received by the Company or any agent thereof relative to the development of its Products, (v) none of the Company or, to the Company's knowledge, its employees, its Affiliates or its agents, has ever been sanctioned, formally or otherwise, by the FDA, and (vi) there has not been any suspensions or debarments by the FDA or other federal departments and state regulatory bodies against the Company or, to the Company's knowledge, any current or former employees of the Company.

6.16 INVESTMENT COMPANY. The Company is not an "investment company" or an "affiliated person" of, or "promoter" or "principal underwriter" for an investment company, within the meaning of the Investment Company Act of 1940, as amended.

6.17 COMPLIANCE. The Common Stock is registered pursuant to Section 12(g) of the Exchange Act, and is listed on the OTC bulletin board, and the Company has taken no action designed to, or likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act or delisting the Common Stock from the OTC bulletin board. The Company has complied with all requirements with respect to the issuance of the Purchased Shares and the listing thereof on the OTC bulletin board. The Company has not taken and will not, in violation of applicable law, take, any action outside the ordinary course of business designed to or that might reasonably be expected to cause or result in unlawful manipulation of the price of the Common Stock to facilitate the sale or resale of the Purchased Shares.

6.18 PRIVATE OFFERINGS. Assuming the truth of each Purchaser's representations and acknowledgments contained in Section 5 hereof, neither the Company nor any Person acting on its behalf (other than the Purchasers, as to whom the Company makes no representations) has offered or sold the Securities by means of any general solicitation or general advertising within the meaning of Rule 502(c).

under the Securities Act. The Company has not sold the Securities to anyone other than the subscribers to this Agreement. Each Security shall bear substantially the same legend set forth in Section 8 hereof for at least so long as required by the Securities Act.

6.19 BROKER'S OR FINDER'S COMMISSIONS. Except as set forth on SCHEDULE 6.19, no finder, broker, agent, financial person or other intermediary has acted on behalf of the Company in connection with the sale of the Securities by the Company or the consummation of this Agreement or any of the transactions contemplated hereby. The Company has not had any direct or indirect contact with any other investment banking firm (or similar firm) with respect to the offer of the Securities by the Company to the Purchasers or the Purchasers' subscriptions for the Securities.

6.20 DISCLOSURE. The Transaction Documents do not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements contained herein or therein, in the light of the circumstances under which they were made, not misleading. The Company does not have any knowledge of any fact that has specific application to the Company (other than general economic or industry conditions) and that can reasonably be foreseen to cause a Material Adverse Effect that has not been set forth in the Transaction Documents or the Commission Documents.

The Company certifies that each of the foregoing representations and warranties by the Company sets forth in this Section 6 are true as of the date hereof and shall survive such date as contemplated in Section 7.1.

7. INDEMNIFICATION.

7.1 The Company agrees to indemnify and hold harmless the Purchasers, their affiliates and each of their respective directors, officers, general and limited partners, principals, agents and attorneys (individually, an "INDEMNIFIED PARTY" and collectively, the "INDEMNIFIED PARTIES") from and against any and all losses, claims, damages, Liabilities, costs (including reasonable attorneys' fees) and expenses (collectively, "LOSSES") to which any Indemnified Party may become subject, insofar as such Losses arise out of, in any way relate to, or result from (i) any breach of any representation or warranty made by the Company contained in or made pursuant to this Agreement, or (ii) the failure of the Company to fulfill any agreement or covenant contained in or made pursuant to this Agreement. All of the representations and warranties of the Company made herein shall survive the execution and delivery of this Agreement until the date that is ninety (90) days after the filing by the Company with the Commission of audited financial statements of the Company for the fiscal year ending June 30, 2003 (or, if such fiscal year changes and no such audited consolidated financial statements are available, then the successor fiscal year), except for (a) Sections 6.1 (Organization, Good Standing and Qualification), 6.2 (Capitalization), 6.3 (Corporate Power, Authorization; Enforceability), 6.18 (Private Offerings) and 6.19 (Broker's or Finder's Commission), which representations and warranties shall survive indefinitely (or if indefinite survival is not permitted by law, then for the maximum period permitted by applicable law), (b) Section 6.12 (Taxes), which representation and warranty shall survive until the later to occur of (i) the lapse of the statute of limitations with respect to the assessment of any tax to which such representation and warranty relates (including any extensions or waivers thereof) and (ii) sixty (60) days after the final administrative or judicial determination of the Taxes to which such representation and warranty relates, and no claim with respect to Section 6.12 may be asserted thereafter with the exception of claims arising out of any fact, circumstance, action or proceeding to which the party asserting such claim shall have given notice to the other parties to this Agreement prior to the termination of such period of reasonable belief that a tax liability will subsequently arise therefrom, and (c) Section 6.11 (Environmental Matters), which representation and warranty shall survive until the lapse of the applicable statute of limitations. Except as set forth herein, all of the covenants, agreements and obligations of the parties hereto shall survive the

Final Closing indefinitely (or if indefinite survival is not permitted by law, then for the maximum period permitted by applicable law).

7.2 Promptly after receipt by an Indemnified Party under Section 7.1 of notice of any claim as to which indemnity may be sought, including, without limitation, the commencement of any action or proceeding, the Indemnified Party will, if a claim in respect thereof may be made against the indemnifying party under this Section, promptly notify the indemnifying party in writing of the commencement thereof; provided that the failure of the Indemnified Party to so notify the indemnifying party will not relieve the indemnifying party from its obligations under this Section unless, and only to the extent that, such omission results in the indemnifying party's forfeiture of substantive rights or defenses or being materially prejudiced by the Indemnified Person's failure to give such notice. In case any action or proceeding is brought against any Indemnified Party, and it notifies the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to assume the defense thereof at its own expense, with counsel satisfactory to such Indemnified Party in its reasonable approval (which approval will not be withheld or delayed unreasonably); provided, however, that any Indemnified Party may, at its own expense, retain separate counsel to participate in such defense at its own expense. After notice from the indemnifying party to the Indemnified Party of its election to so assume the defense thereof, the indemnifying party will not be Liable to the Indemnified Party under that Section 7 for any legal or any other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof (other than reasonable costs of investigation) unless incurred at the written request of the indemnifying party. Notwithstanding the above, the Indemnified Party will have the right to employ counsel of its own choice in any action or proceeding (and be reimbursed by the indemnifying party for the reasonable fees and expenses of the counsel and other reasonable costs of the defense) if, in the written opinion of such Indemnified Party's counsel, representation of the Indemnified Party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests or conflicts between the Indemnified Party and any other party represented by the counsel in the action; PROVIDED, HOWEVER, that the indemnifying party will not in connection with any one action or proceeding or separate but substantially similar actions or proceedings arising out of the same general allegations, be Liable for the reasonable fees and expenses of more than one separate firm of attorneys at any time for all Indemnified Parties, except to the extent that local counsel, in addition to regular counsel, is required in order to effectively defend against the action or proceeding. An indemnifying party will not be Liable to any Indemnified Party for any settlement or entry of judgment concerning any action or proceeding effected without the consent of the indemnifying party, which consent shall not be unreasonably withheld. The indemnifying party agrees that it will not, without the prior written consent of the Indemnified Party, settle, compromise or consent to the entry of any judgment in any pending or threatened claim relating to the matters contemplated hereby (if any Indemnified Party is a party thereto or has been actually threatened to be made a party thereto) unless such settlement, compromise or consent includes an unconditional release of each Indemnified Party from all liability arising or that may arise out of such claim. The rights accorded to an Indemnified Party hereunder shall be in addition to any rights that any Indemnified Party may have at common law, by separate agreement or otherwise; PROVIDED, HOWEVER, that notwithstanding the foregoing or anything to the contrary contained in this Agreement, (a) nothing in this Section 7 shall restrict or limit any rights that any Indemnified Party may have to seek equitable relief and (b) this Section 7 shall be the sole remedy for any breach of the Company's representations and warranties contained in Section 6 except with respect to claims arising out of fraud or willful misconduct.

8. COVENANTS.

8.1 OBSERVATION RIGHTS. At any time Perseus-Soros BioPharmaceutical Fund, LP ("PERSEUS-SOROS") and its Affiliates (as such term is defined in Rule 405 of the Securities Act) are not represented on

the Board pursuant to Section 3.7, so long as Perseus-Soros owns at least 25% of the shares of the Series A Preferred Stock acquired by it on the date hereof or 10% of the outstanding shares of Common Stock on an "as-converted basis," Perseus-Soros shall have the right to (a) appoint a non-voting representative (the "OBSERVER") to attend meetings of the Board, to change the non-voting representative so appointed at any time and, upon the resignation of such representative for any reason, to reappoint such a representative, if and for so long as Perseus-Soros does not have a representative on the Board; (b) make proposals, recommendations and suggestions to the Company's officers and directors relating to the business and affairs of the Company at such reasonable times as may be requested by Perseus-Soros but in no event shall the Company be required to accept such proposals, recommendations or suggestions; (c) discuss the Company's business and affairs with the Company's officers, directors and independent accountants at such reasonable times as may be requested by Perseus-Soros; (d) have access to such other information relating to the affairs of the Company as Perseus-Soros may reasonably request; and (e) have access to the properties and facilities of the Company at such reasonable times as may be requested by Perseus-Soros. In addition, the Company shall provide Perseus-Soros with a copy of any materials to be distributed or discussed at such meetings at the same time as provided to members of the Board. The Observer may be excluded from any meeting or portion thereof and Perseus-Soros may be excluded from access to certain information and the properties and facilities of the Company if and to the extent a majority of the Board reasonably determines in good faith that such Observer's attendance at such meeting or portion thereof or Perseus-Soros's receipt of such information or access to the properties and facilities of the Company would adversely affect the attorney-client privilege between the Company and its counsel, involve a conflict of interest between the Company and Perseus-Soros with respect to a material issue for the Company or might violate any requirement of law, contract or confidentiality by which the Company is bound. To the extent the information is non-public, Perseus-Soros covenants and agrees that it will not divulge such confidential information until such time as such information (1) is or becomes generally available to the public other than as a result of a disclosure by Perseus-Soros or its affiliates or their respective representatives, (2) was within Perseus-Soros's possession prior to its being furnished to Perseus-Soros by or on behalf of the Company pursuant hereto, provided that the source of such information was not bound by a non-disclosure or confidentiality agreement with respect to such information, or (3) becomes available to Perseus-Soros on a non-confidential basis from a source other than the Company or any of its representatives, provided that such source is not bound by a non-disclosure or confidentiality agreement with the Company with respect to such information or is not otherwise prohibited from transmitting the information to Perseus-Soros. If Perseus-Soros becomes legally obligated to disclose confidential information by any governmental entity with jurisdiction over it or pursuant to any proceeding (by oral questions, interrogations, requests for information or documents, subpoena, civil investigative demand or similar process) (each a "PROCEEDING"), Perseus-Soros will give the Company prompt written notice to allow the Company to seek a protective order or other appropriate remedy. Such notice must include, without limitation, identification of the information to be so disclosed and a copy of the order (to the extent not prohibited in connection with any such Proceeding). Perseus-Soros will disclose only such information as is legally required and will use commercially reasonable efforts to obtain confidential treatment for any confidential information that is so disclosed. Any such disclosure shall not be in violation of this Section 8.1.

8.2 USE OF PROCEEDS. The Company will use the proceeds from this Offering to continue the clinical development of clofarabine and trilostane; to market and sell clofarabine and trilostane; and for general corporate purposes and working capital.

8.2 BUSINESS DEVELOPMENT. As soon as practicable after the Final Closing, the Company shall use commercially reasonable efforts to: (a) create and implement an annual budget, approved by the Board, (b) hire additional personnel where necessary; and (c) obtain appropriate product liability

insurance to cover all risks associated with the Company's business that are customarily insured against in the industry in such amounts as are customary in the industry.

8.3 EXPENSES. The Company shall pay the reasonable direct expenses of Perseus-Soros (or its designee) which may be incurred in connection with their due diligence review and the negotiation, execution and delivery of this Agreement, the Registration Rights Agreement and all other agreements relating to the transactions contemplated hereby, including, but not limited to, legal fees and expenses; provided, however, such fees and expenses to be reimbursed by the Company are not to exceed \$50,000 in the aggregate without the prior approval of the Company.

8.4 CONDUCT OF THE COMPANY'S BUSINESS. Except as contemplated by this Agreement, during the period from the date hereof to the Final Closing Date, the Company will conduct its business and operations solely in the ordinary course of business consistent with past practice and use reasonable commercial efforts to keep available the services of its officers and employees and preserve its current relationships with customers, suppliers, licensors, creditors and others having business dealings with it.

8.5 REASONABLE BEST EFFORTS. Subject to the terms and conditions of this Agreement, each of the parties hereto will use its reasonable best efforts to take, or cause to be taken, all actions, and to do, or cause to be done, all things necessary, proper or advisable under applicable laws and regulations to consummate the transactions contemplated by this Agreement at the earliest practicable date.

8.6 LIABILITY INSURANCE. Promptly following the Initial Closing, the Company shall purchase officers' and directors' liability insurance in an amount customary for a company of comparable size and in a comparable business as the Company and reasonably satisfactory to Perseus-Soros.

8.7 TAX MATTERS.

(a) The parties hereto agree and acknowledge that (i) no party hereto will treat the Series A Preferred Stock as "preferred stock" within the meaning of Section 305 of the Code (the "REPORTING AGREEMENT") unless otherwise required by a change in law and (ii) no party hereto shall take any position inconsistent with the Reporting Agreement upon examination of any Tax Return, in any refund claim, in any litigation or otherwise.

(b) The Company covenants that it will use commercially reasonable efforts not to become a USRPHC at any time while any Purchaser owns any of the Series A Preferred Stock (or any Common Stock obtained upon a conversion of the Series A Preferred Stock (the "CONVERSION STOCK")).

(c) In the event that a Purchaser desires to sell or dispose of any of the Series A Preferred Stock or Conversion Stock, and upon demand by such Purchaser, the Company agrees to deliver to such Purchaser a letter (the "LETTER") which complies with Sections 1.1445-2(c)(3) and 1.897-2(h) of the Treasury Regulations, addressed to such Purchaser, stating whether or not the Company is a USRPHC. The Letter shall be delivered to the Purchaser one business day prior to the close of any sale or disposition of the Series A Preferred Stock or Conversion Stock by the Purchaser (the "DELIVERY DATE"). The Letter shall be dated as of the Delivery Date and signed by a corporate officer who must verify under penalties of perjury that the statement is correct to his knowledge and belief pursuant to Section 1.897-2(h) of the Treasury Regulations.

9. FOR RESIDENTS OF ALL STATES: THE SECURITIES OFFERED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR THE SECURITIES LAWS OF ANY STATE AND ARE BEING OFFERED AND SOLD IN RELIANCE ON EXEMPTIONS FROM THE REGISTRATION REQUIREMENTS OF SAID ACT AND SUCH LAWS.

THE SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE AND MAY NOT BE TRANSFERRED OR RESOLD EXCEPT AS PERMITTED UNDER SAID ACT AND SUCH LAWS PURSUANT TO REGISTRATION OR EXEMPTION THEREFROM. INVESTORS SHOULD BE AWARE THAT THEY WILL BE REQUIRED TO BEAR THE FINANCIAL RISKS OF THIS INVESTMENT FOR AN INDEFINITE PERIOD OF TIME.

10. NO WAIVER.

Notwithstanding any of the representations, warranties, acknowledgments or agreements made herein by the Purchasers, the Purchasers do not thereby or in any manner waive any rights granted to the Purchasers under federal or state securities laws.

11. MISCELLANEOUS.

11.1 NOTICES. Any notice or other communication given hereunder by any party hereto to any other party hereto shall be in writing and delivered personally or by facsimile transmission or sent by registered or certified mail or by any express mail or overnight courier service, postage or fees prepaid:

If to the Company:

Bioenvision, Inc.
One Rockefeller Plaza
Suite 1600
New York, New York 10020
Attention: President
Facsimile: (212) 265-4680

With a copy to:

Piper Rudnick LLP
1251 Avenue of the Americas
New York, New York 10020-1104
Attention: Andrew J. Cosentino, Esq.
Facsimile: (212) 884-8588

If to the Purchasers:

To each Purchaser at such Purchaser's name and address set forth on the signature page to this Agreement

With a copy to:

SCO Securities LLC
1285 Avenue of the Americas
35th Floor
New York, New York 10019
Attention: Jeffrey B. Davis
Facsimile: (212) 554-4058

Any notice that is delivered personally or by facsimile transmission in the manner provided herein shall be deemed to have been duly given to the party to whom it is directed upon actual receipt by such party or its agent. Any notice that is addressed and mailed or sent by courier in the manner herein provided shall be conclusively presumed to have been duly given to the party to which it is addressed at the close of business, local time of the recipient, on the fourth business day after the day it is so placed in the mail or, if earlier, the time of actual receipt.

11.2 **SUCCESSORS AND ASSIGNS.** This Agreement will be binding upon and inure to the benefit of the parties hereto and to their respective heirs, legal representatives, successors and assigns, provided, that no party may assign this Agreement without the prior written consent of the other party, such consent not to be unreasonably withheld; provided, further, that a Purchaser may assign this Agreement to its affiliates without consent; PROVIDED THAT any transfer of Securities or shares of Common Stock underlying such Securities must be in compliance with the Transaction Documents and all applicable law.

11.3 **ENTIRE AGREEMENT.** This Agreement sets forth the entire agreement and understanding among the parties as to the subject matter hereof and merges and supersedes all prior discussions, agreements and understandings of any and every nature among them; provided that any confidentiality agreement between the Company and any Purchaser shall remain in effect. This Agreement may be amended only by mutual written agreement of the Company and the Purchaser, and the Company may take any action herein prohibited or omit to take any action herein required to be performed by it, and any breach of any covenant, agreement, warranty or representation may be waived, only if the Company has obtained the written consent or waiver of the Purchasers purchasing a majority of the Securities offered hereby.

11.4 **GOVERNING LAW.** This Agreement shall be governed by and construed in accordance with the laws of the State of New York with respect to contracts made and to be fully performed therein, without regard to the conflicts of laws principles thereof. The parties hereto hereby agree that any suit or proceeding arising under this Agreement, or in connection with the consummation of the transactions contemplated hereby, shall be brought solely in a federal or state court located in the County of New York and State of New York. By its execution hereof, both the Company and the Purchasers hereby consent and irrevocably submit to the in personam jurisdiction of the federal and state courts located in the County of New York and State of New York and agree that any process in any suit or proceeding commenced in such courts under this Agreement may be served upon it personally or by certified or registered mail, return receipt requested, or by Federal Express or other courier service, with the same force and effect as if personally served upon the applicable party in New York and in the city or county in which such other court is located. The parties hereto each waive any claim that any such jurisdiction is not a convenient forum for any such suit or proceeding and any defense of lack of in personam jurisdiction with respect thereto.

11.5 **SEVERABILITY.** The holding of any provision of this Agreement to be invalid or unenforceable by a court of competent jurisdiction will not affect any other provision of this Agreement, which will remain in full force and effect. If any provision of this Agreement is declared by a court of competent jurisdiction to be invalid, illegal or incapable of being enforced in whole or in part, the provision will be interpreted so as to remain enforceable to the maximum extent permissible consistent with applicable law and the remaining conditions and provisions or portions thereof will nevertheless remain in full force and effect and enforceable to the extent they are valid, legal and enforceable, and no provisions will be deemed dependent upon any other covenant or provision unless so expressed herein.

11.6 **NO WAIVER.** A waiver by either party of a breach of any provision of this Agreement will not operate, or be construed, as a waiver of any subsequent breach by that same party.

11.7 FURTHER ASSURANCES. The parties agree to execute and deliver all further documents, agreements and instruments and take further action as may be necessary or appropriate to carry out the purposes and intent of this Agreement.

11.8 COUNTERPARTS. This Agreement may be executed in two or more counterparts, each of which will be deemed an original, but all of which will together constitute the same instrument.

11.9 NO THIRD PARTY BENEFICIARIES. Nothing in this Agreement creates in any Person not a party to this Agreement any legal or equitable right, remedy or claim under this Agreement, and this Agreement is for the exclusive benefit of the parties hereto. The parties expressly recognize that this Agreement is not intended to create a partnership, joint venture or other similar arrangement between any of the parties or their respective affiliates.

11.10 HEADINGS. The headings in this Agreement are solely for convenience of reference and shall be given no effect in the construction or interpretation of this Agreement.

11.11 PUBLICITY RESTRICTIONS. Except as may be required by applicable Requirements of Law, none of the parties hereto shall issue a publicity release or public announcement or otherwise make any disclosure concerning this Agreement, the transactions contemplated hereby without prior approval by the other party hereto; provided that each Purchaser may disclose on its worldwide web pages and its offering materials, if any, the name of the Company, the name of the Chief Executive Officer of the Company, a brief description of the business of the Company consistent with the Commission Documents or the Company's press releases or other public statements, the Company's logo and the aggregate amount of such Purchaser's investment in the Company. If any announcement is required by applicable law or the rules of any securities exchange or market on which such shares of Common Stock are traded to be made by any party hereto, prior to making such announcement such party will deliver a draft of such announcement to the other parties and shall give the other parties reasonable opportunity to comment thereon. The parties agree to attribute and otherwise indicate ownership of the other party's trademarks and logos.

11.12 CERTIFICATION. Each Purchaser certifies that such Purchaser has read this entire Agreement and that every statement on such Purchaser's part made and set forth herein is true and complete in all material respects.

[Remainder of page intentionally left blank.]

IN WITNESS WHEREOF, the undersigned has executed this Securities Purchase Agreement on the date his signature has been subscribed and sworn to below.

The shares of Series A Preferred Stock and the common stock purchase warrants are to be issued in:

	Perseus-Soros BioPharmaceutical Fund, L.P. ----- Print Name of Investor
<input type="checkbox"/> individual name	3,000,000 shares of Series A Preferred Stock subscribed for
<input type="checkbox"/> joint tenants with rights of survivorship paid herewith:	3,000,000 Warrants subscribed for
<input type="checkbox"/> tenants in the entirety	Subscription price \$9,000,000 (being \$3.00 x the number of shares of Series A Preferred Stock listed above)
<input type="checkbox"/> corporation (an officer must sign)	Print Name of Joint Investor (if applicable)
<input checked="" type="checkbox"/> partnership (all general partners must sign)	PERSEUS-SOROS BIOPHARMACEUTICAL FUND, LP ----- By: Perseus-Soros Partners, LLC, General Partner
	By: SFM Participation, L.P., Managing Member
	By: SFM AH, Inc.
	By: /s/ Richard D. Holahan, Jr. ----- Name: Richard D. Holahan, Jr. Title: Secretary
<input type="checkbox"/> trust	Signature of Joint Investor
<input type="checkbox"/> limited liability company	----- (with a copy to:) ----- -----
	Address of Investor

Accepted as of the 7th day of May, 2002, as to 3,000,000 shares of Series A Preferred Stock and 3,000,000 Warrants; Subscription price accepted being \$9,000,000, being \$3.00 x the number of shares of Series A Preferred Stock as to which this Subscription is accepted:

BIOENVISION, INC.

By: /s/ Christopher B. Wood

Name: Dr. Christopher B. Wood

Title: Chief Executive Officer

EXHIBIT A

FORM OF CERTIFICATE OF DESIGNATIONS

EXHIBIT B

FORM OF WARRANT

EXHIBIT C

FORM OF REGISTRATION RIGHTS AGREEMENT

EXHIBIT D TO FORM OF SECURITIES PURCHASE AGREEMENT

Matters to be Covered in Legal Opinion of Piper Rudnick LLP

1. The Company is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware.

2. The Company has all necessary corporate power and authority to execute, deliver, enter into and perform its obligations under each of the Transaction Documents and to consummate the transactions contemplated thereby, including, without limitation, to issue, sell and deliver the Series A Preferred Stock and Warrants and the shares of Common Stock issuable upon conversion and exercise, respectively, thereof. The execution, delivery and performance of each of the Transaction Documents has been duly authorized by all necessary corporate action on the part of the Company.

3. The Transaction Documents have been duly executed and delivered by the Company and constitute a legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, subject to laws of general application relating to bankruptcy, insolvency and the relief of debtors and rules of law governing specific performance, injunctive relief or other equitable remedies, and to limitations of public policy.

4. The Securities and the shares of Common Stock into which they are convertible or for which they are exercisable have been duly authorized and, when issued in accordance with the Securities Purchase Agreement, the Certificate of Designations and the Warrants, as applicable, will be validly issued, fully paid and nonassessable and will be free and clear of all Liens imposed by or through the Company other than restrictions imposed by the Securities Purchase Agreement, the Certificate of Designations, the Warrants and applicable securities laws. No statutory or, to our knowledge, contractual preemptive or other rights to subscribe for or purchase equity securities of the Company exists with respect to the issuance and sale of the Securities by the Company pursuant to the Transaction Documents.

5. The execution and delivery by the Company of the Transaction Documents do not and the consummation of the transactions contemplated thereby will not (A) violate any provision of the Certificate of Incorporation or By-laws of the Company, (B) violate any law, statute, rule, regulation, order, judgment or decree of any court or Governmental Authority which, to our knowledge, is applicable to the Company, or (C) to our knowledge, breach or constitute (with due notice or lapse of time or both) a default under, any material agreement to which the Company is a party or by which it is bound or to which any of its properties or assets is subject, nor result in the creation or imposition of any Lien, other than Permitted Liens, upon any of the properties or assets of the Company, except for, in the case of clauses (B) and (C), any violation, breach or default which would not have a Material Adverse Effect.

6. Except for filings, authorizations or approvals contemplated by the Securities Purchase Agreement, no authorizations or approvals of, and no filings with, any Governmental Authority are necessary or required by the Company for the execution and delivery of the Transaction Documents or the consummation of the transactions contemplated thereby.

7. The Company is not an "investment company" within the meaning of the Investment Company Act of 1940, as amended.

8. Assuming the accuracy of the representations and warranties of the Purchasers in the Securities Purchase Agreement, the offer and sale of the Securities is exempt from the registration requirements of the Securities Act of 1933, as amended, pursuant to Section 4(2) and/or Rule 506 under Regulation D of the Securities Act.

The opinion will set forth the Firm's customary assumptions and qualifications. The opinion will only be given as to matters of New York law and U.S. federal law, and Delaware General Corporation law.

EXHIBIT E

FORM OF EMPLOYEE AGREEMENT

BIOENVISION INC

345 PARK AVENUE
41ST FLOOR
NEW YORK, NY 10154
212-750-6700

EX-10

EXHIBIT 3
SC 13D Filed on 05/20/2002
File Number 005-78274



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800.669.1154
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EXHIBIT 3
to SCHEDULE 13D

CERTIFICATE OF DESIGNATIONS, PREFERENCES AND RIGHTS
OF
THE SERIES A CONVERTIBLE PARTICIPATING PREFERRED STOCK
OF
BIOENVISION, INC.

(Pursuant to Section 151 of the
Delaware General Corporation Law)

Bioenvision, Inc., a corporation organized and existing under the laws of the State of Delaware (the "COMPANY"), hereby certifies that, pursuant to the authority vested in the Board of Directors of the Company (the "BOARD") by the Certificate of Incorporation of the Company (the "CERTIFICATE OF INCORPORATION"), as amended, the following resolution was adopted as of May 7, 2002 by the Board pursuant to Section 141 of the Delaware General Corporation Law:

RESOLVED, that pursuant to the authority granted to and vested in the Board in accordance with the provisions of the Certificate of Incorporation, as amended, there shall be created a series of Preferred Stock, \$0.001 par value, which series shall have the following designations and number thereof, powers, preferences, rights, qualifications, limitations and restrictions:

1. DESIGNATION AND NUMBER OF SHARES. There shall hereby be created and established a series of Preferred Stock designated as "Series A Convertible Participating Preferred Stock" (the "SERIES A PREFERRED STOCK"). The authorized number of shares of Series A Preferred Stock shall be 5,920,000.

2. CONVERSION.

(a) RIGHT TO CONVERT. Each share of Series A Preferred Stock shall be convertible into a number of shares of Common Stock equal to the applicable Liquidation Amount (as defined in Section 5 herein) divided by the then applicable Conversion Price (as defined herein) upon the earlier to occur of (i) the election of the holder to convert (an "OPTIONAL CONVERSION"), in whole or in part, at any time, or from time to time, commencing with date of the issuance of Series A Preferred Stock (the "ISSUANCE DATE") or (ii) the date, at any time after the one year anniversary of the Issuance Date, upon which both (x) the average of the Market Price (as defined herein) for a share of Common Stock for thirty consecutive Trading Days (as defined herein) exceeds \$10.00 (subject to adjustment in the event of stock splits, reverse stock splits, stock dividends, recapitalizations or similar events) and (y) the average of the trading volume for the Common Stock during such period exceeds 150,000 (subject to adjustment in the event of stock splits, reverse stock splits, stock dividends, recapitalizations or similar events) shares per Trading Day (an "AUTOMATIC Conversion").

(b) As used herein, "Market Price" means, with respect to the shares of Common Stock, (i) if the shares are listed or admitted for trading on any national securities exchange or included in The Nasdaq National Market or Nasdaq SmallCap Market, the last reported sales price as reported on such exchange or market; (ii) if the shares are not listed or admitted for trading on any national securities exchange or included in The Nasdaq National Market or Nasdaq SmallCap Market, the average of the last reported closing bid and asked quotation for the shares as reported on the National Association of Securities Dealers Automated Quotation System ("NASDAQ") or a similar service if NASDAQ is not reporting such information; or (iii) if the shares are not listed or admitted for trading on any national securities exchange or included in The Nasdaq National Market or Nasdaq SmallCap Market or quoted by NASDAQ or a similar service, the average of the last reported bid and asked quotation for the shares as quoted by a market maker in the shares (or if there is more than one market maker, the bid and asked quotation shall be obtained from two market makers and the average of the lowest bid and highest asked quotation) (such applicable trading market to be referred to the "TRADING MARKET"). In the absence of any available public quotations for the Common Stock, the Board shall determine in good faith the fair value of the Common Stock, which determination shall be set forth in a certificate by the Secretary of the Company.

As used herein, "Trading Day" means a day on which the principal Trading Market with respect to the Common Stock is open for the transaction of business.

(c) **EFFECTING A CONVERSION.** The holder shall effect any Optional Conversion by surrendering the certificate or certificates representing the shares of Series A Preferred Stock to be converted to the Company, together with written notice of its election to convert and specifying the name or names (with address) in which a certificate or certificates for shares of Common Stock are to be issued (a "STOCKHOLDER CONVERSION NOTICE"). Each Stockholder Conversion Notice shall specify the number of shares of Series A Preferred Stock to be converted and the date on which such conversion is to be effected, which date may be neither prior to, nor more than ten days after, the date the holder delivers such Stockholder Conversion Notice. If no conversion date is specified in a Stockholder Conversion Notice, the conversion date shall be the date that the Stockholder Conversion Notice is delivered. Each Stockholder Conversion Notice, once given, shall be irrevocable. A holder of Series A Preferred Stock may only convert shares of Series A Preferred Stock in blocks equal to the lesser of (i) the number of shares of Series A Preferred Stock convertible into 1,000 shares of Common Stock and (ii) all shares of Series A Preferred Stock then held by the stockholder. If the holder is converting less than all shares of Series A Preferred Stock represented by the certificate or certificates tendered by the holder with the Stockholder Conversion Notice, the Company shall convert the number of shares of Series A Preferred Stock so specified and shall promptly deliver (but not more than three business days later) to such holder a certificate for such number of shares as have not been converted. Upon an Automatic Conversion, the Company shall notify each holder thereof and each holder shall surrender the certificate or certificates representing all of the shares of Series A Preferred Stock owned by such holder and each holder of shares of Series A Preferred Stock shall be deemed to be the holder of record of the Common Stock issued upon such Automatic Conversion. All fractional shares resulting from the conversion of the Series A Preferred Stock shall be rounded up to the next highest whole share. All certificates representing shares of Series A Preferred Stock surrendered for conversion shall be delivered to the Company for cancellation and canceled by it. As promptly as practicable (but no more than three business days)

after the surrender of any shares of Series A Preferred Stock, the Company shall (subject to compliance with the applicable provisions of federal and state securities laws) deliver to the holder of such shares so surrendered certificate(s) representing the number of fully paid and nonassessable shares of Common Stock into which such shares are entitled to be converted. Upon a conversion, any accrued and unpaid dividends shall be paid either in cash, to the extent funds are legally available therefor, or shares of Common Stock valued at the Market Price, in the sole discretion of the Company.

(d) CONVERSION PRICE. The initial conversion price per share of the Series A Preferred Stock (the "CONVERSION PRICE") shall be equal to \$1.50 per share of Common Stock into which such number of shares of Series A Preferred Stock is convertible, subject to adjustment as provided in Section 3.

(e) RESERVATION OF SHARES. The Company covenants that it will at all times reserve and keep available out of its authorized and unissued Common Stock solely for the purpose of issuance upon conversion of Series A Preferred Stock, as herein provided, free from preemptive rights or any other actual contingent purchase rights of persons other than the holders of Series A Preferred Stock, not less than such number of shares of Common Stock as shall be issuable upon the conversion of all outstanding shares of Series A Preferred Stock. The Company covenants that all shares of Common Stock that shall be so issuable shall, upon issue, be duly and validly authorized, issued and fully paid, nonassessable and freely tradeable.

If at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of Series A Preferred Stock, in addition to such other remedies as shall be available to the holders of such Series A Preferred Stock, the Company will take such corporate action necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes.

(f) ISSUE TAXES. The Company shall pay all issue taxes, if any, incurred in respect of the issue of shares of Common Stock on conversion. If a holder of shares of Series A Preferred Stock specifies that the shares of Common Stock to be issued on Automatic Conversion are to be issued in a name or names other than the name or names in which such Series A Preferred Stock stand, then the Company shall not be required to pay any additional transfer or other taxes incurred by reason of the issuance of such shares of Common Stock to the name of another, and if the appropriate transfer taxes shall not have been paid to the Company or the transfer agent for the Series A Preferred Stock at the time of Automatic Conversion of the Series A Preferred Stock, the shares of Common Stock issued upon conversion thereof may be registered in the name or names in which the Series A Preferred Stock were registered, despite the instructions to the contrary.

3. ADJUSTMENT OF CONVERSION PRICE.

(a) DEFINITION OF ADDITIONAL STOCK. For purposes of this Section 3, "Additional Shares of Common Stock" includes all shares of Common Stock issued by the Company after the Issuance Date, other than:

- (i) Shares of Common Stock issued upon conversion of shares of Series A Preferred Stock;
- (ii) Shares of Common Stock (subject to appropriate adjustment for any stock dividend, stock split, combination or other similar recapitalization affecting such shares) issuable or issued to the Company's employees, directors or consultants pursuant to a stock option plan or restricted stock plan approved by the Board;
- (iii) Shares of Common Stock issued or issuable pursuant to subsection 3(d) below;
- (iv) Shares of Common Stock or Preferred Stock issuable upon exercise of options, warrants or upon conversion of convertible securities or other rights outstanding as of the Issuance Date; and
- (v) Shares of capital stock or options or warrants to purchase capital stock issued to financial institutions or lessors in connection with commercial credit agreements, equipment financings or similar transactions or to other corporations, persons or entities in connection with acquisitions, mergers or similar business combinations, partnership arrangements, strategic alliances, licensing arrangements or similar non-capital raising transactions approved by the Board; PROVIDED THAT if more than 33% of the currently outstanding shares of capital stock are issued in connection with one or a series of related acquisitions, then any shares issued in excess of 33% of the currently outstanding shares of capital stock shall be deemed Additional Shares of Common Stock; PROVIDED, FURTHER, THAT in no event shall the foregoing apply to any issuances to private equity or venture capital firms or any private equity division of any investment bank or commercial bank unless such issuances are made pursuant to contracts or other obligations existing as of the date hereof.

The number and kind of securities issuable upon the conversion of the Series A Preferred Stock and the Conversion Price shall be subject to adjustment from time to time in accordance with the following provisions:

(b) SUBDIVISION OR COMBINATION OF SHARES. In the event that the Company shall at any time or from time to time, prior to conversion of shares of Series A Preferred Stock (x) subdivide the outstanding shares of Common Stock into a larger number of shares or (y) combine the outstanding shares of Common Stock into a smaller number of shares, then, and in each such case, the Conversion Price in effect immediately prior to such event shall be adjusted (and any other appropriate actions shall be taken by the Company) so that the holder of any share of Series A Preferred Stock thereafter surrendered for conversion shall be entitled to receive the number of shares of Common Stock or other securities of the Company that such holder would have owned or would have been entitled to receive upon or by reason of any of the events described above, had such share of Series A Preferred Stock been converted immediately prior to the occurrence of such event. An adjustment made pursuant to this Section 3(b) shall become effective retroactively in the case of any such subdivision or combination, to the close of business on the day upon which such corporate action becomes effective.

(c) STOCK DIVIDENDS. In case Additional Shares of Common Stock are issued as a dividend or other distribution on the Common Stock (or such dividend is declared), the Conversion Price shall be reduced, as of the date a record is taken of the holders of Common Stock for the purpose of receiving such dividend or other distribution (or if no such record is taken, as at the earliest of the date of such declaration, payment or other distribution), to the Conversion Price determined by multiplying the Conversion Price in effect immediately prior to such declaration, payment or other distribution by a fraction (i) the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to the declaration or payment of such dividend or other distribution, and (ii) the denominator of which shall be the total number of shares of Common Stock outstanding immediately after the declaration or payment of such dividend or other distribution. In the event that the Company shall declare or pay any dividend on the Common Stock payable in any right to acquire Common Stock for no consideration, then the Company shall be deemed to have made a dividend payable in Common Stock in an amount of shares equal to the maximum number of shares issuable upon exercise of such rights to acquire Common Stock.

(d) RECAPITALIZATION OR RECLASSIFICATION OF COMMON STOCK. In case of any (i) capital reorganization or any reclassification (other than a change in par value) of the capital stock of the Company, or (ii) exchange or conversion of the Common Stock for or into securities of another corporation or other entity, or (iii) consolidation or merger of the Company with or into any other person (other than a merger which does not result in any reclassification, conversion, exchange or cancellation of outstanding shares of Common Stock) or (iv) sale, lease or other conveyance of all or substantially all of the assets of the Company, then in each instance referred to in the preceding clauses (i) through (iv), the Board and the person formed by such consolidation or resulting from such capital reorganization, reclassification or merger or which acquires (by sale, lease or other conveyance) such assets, as the case may be, shall make provision upon the election of the holder of Series A Preferred Stock pursuant to Section 5 below such that the Series A Preferred Stock shall thereafter be convertible for the kind and amount of shares of stock, other securities, cash and other property receivable upon such capital reorganization, reclassification, consolidation, merger, sale, lease or other conveyance, as the case may be, by a holder of shares of Common Stock equal to the number of shares of Common Stock underlying the Series A Preferred Stock issuable upon the conversion of the Series A Preferred Stock immediately prior to the effective date of such capital reorganization, reclassification, merger, consolidation, sale, lease or other conveyance and, in each instance referred to in the preceding clauses (i) through (iv) (each, a "TRANSACTION"), appropriate adjustment (as reasonably determined in good faith by the Board) shall be made in the application of the provisions herein set forth with respect to rights and interests thereafter of the holder of the Series A Preferred Stock, to the end that the provisions set forth herein (including the specified changes in and other adjustments of the number of shares underlying the Series A Preferred Stock) shall thereafter be applicable, as near as reasonably may be, in relation to any such shares of stock or other securities or other property thereafter deliverable upon conversion of the Series A Preferred Stock. The Company shall not enter into any Transaction unless effective provision shall be made so as to give effect to the provisions set forth in this subsection (d).

The Company shall not effect any transaction described in this subsection 3(d) unless (i) it first gives, to the extent practical, twenty (20) days' prior written notice (but in any event at least ten (10) days prior written notice) of such merger, consolidation, exchange of shares, recapitalization,

reorganization or other similar event or sale of assets (during which time the holders of Series A Preferred Stock shall be entitled to convert the Series A Preferred Stock) and (ii) the resulting successor or acquiring entity (if not the Company) assumes by written instrument the obligations of this subsection 3(d). The provisions of this subsection 3(d) shall similarly apply to successive consolidations, reorganizations, reclassifications, exchanges, conversions, mergers, sales, leases and other conveyances.

(e) ISSUANCE OF STOCK AT LESS THAN CONVERSION PRICE. If the Company shall issue any Additional Shares of Common Stock after the Issuance Date (other than as provided in the foregoing subsections 3(b) through 3(d)), for no consideration or for a consideration per share less than the Conversion Price in effect on the date of and immediately prior to such issue, then in such event, the Conversion Price shall be reduced, concurrently with such issue, to a price equal to the quotient obtained by dividing:

(A) an amount equal to (x) the total number of shares of Common Stock outstanding immediately prior to such issuance or sale multiplied by the Conversion Price in effect immediately prior to such issuance or sale, plus (y) the aggregate consideration received or deemed to be received by the Company upon such issuance or sale, by

(B) the total number of shares of Common Stock outstanding immediately after such issuance or sale.

(f) ISSUANCE OF OPTIONS AND CONVERTIBLE SECURITIES DEEMED ISSUANCE OF ADDITIONAL SHARES OF COMMON STOCK. If the Company, at any time or from time to time after the Issuance Date, shall issue any options, warrants or rights to purchase Common Stock (collectively, "OPTIONS") or securities that, by their terms, directly or indirectly, are convertible into or exchangeable for shares of Common Stock ("CONVERTIBLE SECURITIES") or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares of Common Stock (as set forth in the instrument relating thereto without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued under this Certificate as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date, provided that in any such case in which Additional Shares of Common Stock are deemed to be issued:

(i) no further adjustment in the Conversion Price shall be made upon the subsequent issue of Convertible Securities or shares of Common Stock upon the exercise of such Options or conversion or exchange of such Convertible Securities and, upon the expiration of any such Option or the termination of any such right to convert or exchange such Convertible Securities, the Conversion Price then in effect hereunder shall forthwith be increased to the Conversion Price which would have been in effect at the time of such expiration or termination had such Option or Convertible Securities, to the extent outstanding immediately prior to such expiration or termination, never been issued, and the Common Stock issuable thereunder shall no longer be deemed to be outstanding;

(ii) if such Options or Convertible Securities by their terms provide, with the passage of time or otherwise, for any increase in the consideration payable to the Company, or decrease in the number of shares of Common Stock issuable, upon the exercise, conversion or exchange thereof, the Conversion Price computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto), and any subsequent adjustments based thereon, shall, upon any such increase or decrease becoming effective, be recomputed to reflect such increase or decrease insofar as it affects such Options or the rights of conversion or exchange under such Convertible Securities, provided that no readjustment pursuant to this clause (B) shall have the effect of increasing the Conversion Price to an amount which exceeds the lower of (i) the Conversion Price on the original adjustment date, or (ii) the Conversion Price that would have resulted from any issuance of Additional Shares of Common Stock between the original adjustment date and such readjustment date; and

(iii) if such Options or Convertible Securities by their terms provide, with the passage of time or otherwise, for any decrease in the consideration payable to the Company, or increase in the number of shares of Common Stock issuable, upon the exercise, conversion or exchange thereof, the Conversion Price computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto), and any subsequent adjustments based thereon, shall, upon any such decrease or increase becoming effective, be recomputed to reflect such decrease or increase insofar as it affects such Options or the rights of conversion or exchange under such Convertible Securities, provided that no readjustment pursuant to this clause (C) shall have the effect of decreasing the Conversion Price to an amount which exceeds the lower of (i) the Conversion Price on the original adjustment date, or (ii) the Conversion Price that would have resulted from any issuance of Additional Shares of Common Stock between the original adjustment date and such readjustment date.

(iv) DETERMINATION OF CONSIDERATION. For purposes of this Subsection 3(f), the aggregate consideration received by the Company for the issue of any Additional Shares of Common Stock shall be computed as follows:

(A) CASH AND PROPERTY: Such consideration shall:

- (1) insofar as it consists of cash, be computed at the aggregate of cash received by the Company, excluding amounts paid or payable for accrued interest or accrued dividends;
- (2) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board; and

in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Company for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (1) and (2) above, as determined in good faith by the Board.

(B) OPTIONS AND CONVERTIBLE SECURITIES. The consideration per share

received by the Company for Additional Shares of Common Stock deemed to have been issued pursuant to Subsection 3(f)(ii), relating to Options and Convertible Securities, shall be determined by dividing

- (1) the total amount, if any, received or receivable by the Company as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Company upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by
- (2) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities.

(g) OTHER PROVISIONS APPLICABLE TO ADJUSTMENT UNDER THIS SECTION 3. The following provisions shall be applicable to the adjustments in the Conversion Price as provided in this Section 3.

(i) TREASURY SHARES. The number of shares of Common Stock at any time outstanding shall not include any shares thereof then directly or indirectly owned or held by or for the account of the Company.

(ii) OTHER ACTION AFFECTING COMMON STOCK. If the Company shall take any action affecting the outstanding number of shares of Common Stock other than an action described in any of the foregoing subsections 3(b) through 3(f) hereof, inclusive, which would have an inequitable effect on the holders of the Series A Preferred Stock, then the Conversion Price shall be adjusted in such manner and at such times as the Board on the advice of the Company's independent public accountants may in good faith determine to be equitable in the circumstances.

(iii) MINIMUM ADJUSTMENT. No adjustment of the Conversion Price shall be made if the amount of any such adjustment would be an amount less than one percent (1%) of the Conversion Price then in effect, but any such amount shall be carried forward and an adjustment in respect thereof shall be made at the time of and together with any subsequent adjustment which, together with such amount and any other amount or amounts so carried forward, shall aggregate an increase or decrease of one percent (1%) or more.

(iv) CERTAIN ADJUSTMENTS. The Conversion Price shall not be adjusted upward

except in the event of a combination of the outstanding shares of Common Stock into a smaller number of shares of Common Stock.

(i) NO IMPAIRMENT. The Company will not, by amendment of its Certificate of Incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Company but will at all times in good faith assist in the carrying out of all the provisions of Section 3 and in the taking of all such action as may be necessary or appropriate in order to protect the conversion rights of the holders of the Series A Preferred Stock against impairment.

(j) NOTICES OF ADJUSTMENTS. Whenever the Conversion Price is adjusted as herein provided, the Chief Financial Officer (or other senior executive officer in the absence of such person) of the Company shall, in good faith, compute the adjusted Conversion Price in accordance with the foregoing provisions and shall prepare a written certificate setting forth such adjusted Conversion Price and showing in detail the facts upon which such adjustment is based, and such written instrument shall promptly be delivered to each record holder of the Series A Preferred Stock.

4. RANKING.

The Series A Preferred Stock shall rank, as to dividends, rights upon liquidation, dissolution or winding up, senior and prior to (i) the Common Stock and (ii) each other class or series of Capital Stock of the Company hereafter created which does not expressly rank PARI PASSU with or senior to the Series A Preferred Stock, except as otherwise approved by the affirmative vote or consent of the holders of shares of Series A Preferred Stock pursuant to Section 9 hereof. (All equity securities of the Company to which the Series A Preferred Stock ranks senior to, whether with respect to dividends, rights upon liquidation, dissolution, winding up or otherwise, including the Common Stock, are collectively referred to herein as "Junior Securities," all equity securities of the Company to which the Series A Preferred Stock ranks on a parity with, whether with respect to dividends or upon liquidation, dissolution, winding up or otherwise, are collectively referred to herein as "Parity Securities" and all equity securities of the Company to which the Series A Preferred Stock ranks junior, whether with respect to dividends or upon liquidation, dissolution, winding up or otherwise are collectively referred to herein as "Senior Securities").

5. LIQUIDATION RIGHTS.

(a) LIQUIDATION PREFERENCE. Upon a voluntary or involuntary liquidation, under applicable bankruptcy or reorganization legislation, or dissolution or winding up of the Company (each, but excluding Deemed Liquidations as defined in subsection (c), below, a "LIQUIDATION"), before any distribution of assets shall be made to the holders of Junior Securities, the holder of each share of Series A Preferred Stock then outstanding shall be paid out of the assets of the Company legally available for distribution to its stockholders (the "AVAILABLE ASSETS") an amount per share equal to the "LIQUIDATION AMOUNT." For purposes of a Liquidation other than a Deemed Liquidation, the Liquidation Amount shall mean the original issue price per share of the Series A Preferred Stock (\$3.00, as adjusted for stock splits, dividends, combinations or other recapitalization of the Series A Preferred Stock) plus all dividends accrued but unpaid on such share (whether or not declared) up

to the date of the Liquidation (the "LIQUIDATION Preference"). Upon the completion of the distribution required by this subsection 4(a), and any other distribution to any other class or series of Senior Securities, if assets remain in the Company, the remaining assets of the Company available for distribution to stockholders shall be distributed among the holders of shares of Series A Preferred Stock, the holders of shares of any series of preferred stock entitled to a participating payment and the holders of Common Stock pro rata based on the number of shares of the Common Stock held by each (as if their shares had been converted into Common Stock pursuant to Section 2 above immediately prior to the record date for determining the stockholders of the Company eligible to receive such dividends).

(b) PRIORITY. If the Available Assets are insufficient to pay the holders of Series A Preferred Stock the full amount of the Liquidation Amount, the holders of Series A Preferred Stock will share ratably in the distribution of the Available Assets in proportion to the respective amounts that would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

(c) DEEMED LIQUIDATION. For the purposes of this Section 5, the following shall be deemed to be a Liquidation (a "DEEMED LIQUIDATION"): (i) the merger, reorganization or consolidation of the Company into or with another corporation (unless the Company is the surviving entity) or other similar transaction or series of related transactions in which more than 50% of the voting power of the Company is disposed of or in which the stockholders of the Company immediately prior to such merger, reorganization or consolidation own less than 50% of the Company's voting power immediately after or (ii) the sale of all or substantially all the assets of the Company. If the holders of a majority of the then outstanding shares of Series A Preferred Stock, acting together as a single class, elect to waive application of this subsection (c) by giving written notice thereof to the Company, such event will not be a "Deemed Liquidation." Upon a Deemed Liquidation, holders of Series A Preferred Stock shall be entitled, at their election to receive either (i) the Liquidation Preference or (ii) the cash and/or the value of the property, rights or securities distributed to such holders by the acquiring person, firm or other entity pro rata based on the number of shares of the Common Stock held by each (as if their shares had been converted into Common Stock pursuant to Section 2 above immediately prior to the record date for determining the stockholders of the Company eligible to receive such dividends). The value of such property, rights or other securities shall be determined in good faith by the Board.

(d) NOTICE. The Company will send a written notice of a Liquidation to the holders of record of the Series A Preferred Stock, stating a payment date, the Liquidation Amount and the place where the Liquidation Amount will be paid, using any of the following delivery methods: (i) in person; (ii) mailed by certified or registered mail, return receipt requested; (iii) sent by national courier; or (iv) sent by telecopier, not less than 25 days prior to the payment date stated therein. The notice will be addressed to each holder at its address as shown by the records of the Company.

6. APPRAISAL. If a majority in interest of the holders of the Series A Preferred Stock reasonably disagrees with any of the Board's determinations referred to in Section 2, Section 3 or Section 5 above (each, a "DETERMINATION"), then the Company and a majority in interest of such holders (the "SERIES A REPRESENTATIVE") shall use good faith efforts to mutually agree upon the

designation of a single Qualified Appraiser (as defined below) within seven (7) business days of such event requiring a Determination. The date of such event requiring a Determination shall be referred to as the "DETERMINATION DATE." If such a single Qualified Appraiser is designated, that person shall make a Determination. If the Company and the Series A Representative do not so agree upon the designation of a single Qualified Appraiser within such period, then within five (5) business days following the end of such period, each of the Company and the Series A Representative by written notice to the other shall designate a Qualified Appraiser (or if any party fails to select a Qualified Appraiser within the time period specified, the person selected by the other party shall be the Qualified Appraiser) and the two Qualified Appraisers so designated shall within ten (10) business days of their designation jointly designate a third Qualified Appraiser and solely such third Qualified Appraiser so designated shall independently make a Determination. If there is only a single Qualified Appraiser, the fees and expenses of the Qualified Appraiser shall be paid equally by the Company and the Series A Representative. If three Qualified Appraisers are appointed, the Company shall pay the fees and expenses of the Qualified Appraiser which it appoints, the Series A Representative shall pay the fees and expenses of the Qualified Appraiser which it appoints, and the fees and expenses of the third Qualified Appraiser shall be shared equally by the Company and the Series A Representative. The designated Qualified Appraiser shall make the Determination not later than ten (10) business days following the Determination Date. The Determination made by the Qualified Appraiser shall be final, conclusive and binding on the parties hereto. None of the Qualified Appraisers shall be affiliated with any of the Company, the Series A Representative or another Qualified Appraiser. For the purposes of this Agreement, "QUALIFIED APPRAISER" shall mean an individual who is engaged on a regular basis (although not necessarily full time) in valuing securities or arrangements similar to this Agreement, as the case may be, and may include (but shall not be limited to) professional business appraisers, investment bankers or accountants.

7. DIVIDENDS.

The holders of outstanding Series A Preferred Stock shall receive cumulative dividends in cash (except as set forth below) quarterly in arrears on the 30th day of January, April, July and October of each year (each such date, a "DIVIDEND PAYMENT DATE") equal to 5% of the initial Liquidation Preference per share of Series A Preferred Stock, whether or not declared by the Board. Dividends shall begin to accrue on the Series A Preferred Stock as of May 7, 2002. Dividends payable on shares of Series A Preferred Stock shall be cumulative; therefore, if a full or partial dividend on the shares of Series A Preferred Stock with respect to any quarter is not declared by the Board, the Company shall remain obligated to pay a full dividend with respect to that quarter, provided, however, that any unpaid dividends shall not bear interest. At the election of the Company, any accrued but unpaid dividends may be paid in cash at any time.

At the election of the Company, each dividend on the Series A Preferred Stock may be paid in shares of Common Stock. Dividends paid in shares of Common Stock shall be paid in full shares only, with a cash payment equal to the value of any fractional shares. The issuance of such shares of Common Stock shall be valued at the average of the per share Market Price for the ten Trading Day period immediately preceding the date on which the dividend becomes due. Each dividend paid in capital stock shall be mailed to the holders of record of the Series A Preferred Stock as their names and addresses appear on the share register of the Company or at the office of the transfer agent on the corresponding dividend payment date. Holders of Series A Preferred Stock will receive

written notification from the Company or the transfer agent if a dividend is paid in kind, which notification will specify the number of shares of Common Stock paid as a dividend. All holders of shares of Common Stock issued as dividends shall be entitled to all of the rights and benefits relating to shares of Common Stock as set forth in the Company's Certificate of Incorporation.

If the Company at any time or from time to time makes, or fixes a record date for the determination of holders of Common Stock entitled to receive, any cash dividends or distributions or other distribution payable in securities of the Company (including evidences of indebtedness or rights or warrants to subscribe for or purchase any such securities) or any other assets or property (a "DISTRIBUTION"), then the holders of the Series A Preferred Stock shall also be entitled to such Distribution, as if their shares the Series A Preferred Stock had been converted into Common Stock pursuant to Section 2 above immediately prior to the record date for determining the stockholders of the Company eligible to receive such Distribution, at such time when the Distribution is made to the holders of Common Stock.

8. VOTING RIGHTS.

Each holder of outstanding shares of Series A Preferred Stock is entitled to the number of votes equal to the number of whole shares of Common Stock into which the shares of Series A Preferred Stock held of record by such holder are convertible at each meeting of stockholders of the Company (and written actions of stockholders in lieu of meetings) with respect to any and all matters presented to the stockholders of the Company for their action or consideration. Except as provided by law and by the provisions of Section 9 below, the holders of shares of Series A Preferred Stock shall vote together with the holders of Common Stock as a single class.

Notwithstanding the above, the Company shall provide each holder of Series A Preferred Stock with prior written notification of any meeting of the stockholders (and copies of proxy materials and other information sent to stockholders). In the event of any undertaking by the Company of a record of its stockholders for the purpose of determining stockholders who are entitled to receive payment of any dividend or other distribution, any right to subscribe for, purchase or otherwise acquire (including by way of merger, consolidation or recapitalization) any share of any class or any other securities or property, or to receive any other right, or for the purpose of determining stockholders who are entitled to vote in connection with any proposed sale, lease or conveyance of all or substantially all of the assets of the Company, or any proposed liquidation, dissolution or winding up of the Company, the Company shall mail a notice to each holder, at least ten (10) days prior to the record date specified therein (or twenty (20) days prior to the consummation of any transaction or event, whichever is earlier), of the date on which any such record is to be taken for the purpose of such dividend, distribution, right or other event, and a brief statement regarding the amount and character of such dividend, distribution, right or other event to the extent known at such time.

To the extent that under the Delaware General Corporation Law ("DGCL") the vote of the holders of the Series A Preferred Stock, voting separately as a class or series as applicable, is required to authorize a given action of the Company, the affirmative vote or consent of the holders of at least a majority of the shares of the Series A Preferred Stock represented at a duly held meeting at which a quorum is present or by written consent of a majority of the shares of Series A Preferred

Stock (except as otherwise may be required under the DGCL) shall constitute the approval of such action by the class. To the extent that under the DGCL holders of the Series A Preferred Stock are entitled to vote on a matter with holders of Common Stock, voting together as one class, each share of Series A Preferred Stock shall entitle the holder thereof to cast that a number of votes per share as is equal to the number of shares of Common Stock into which it is then convertible using the record date for determining the stockholders of the Company eligible to vote on such matters as the date as of which the Conversion Price is calculated. Holders of the Series A Preferred Stock shall be entitled to written notice of all stockholder meetings or written consents (and copies of proxy materials and other information sent to stockholders) with respect to which they would be entitled by vote, which notice would be provided pursuant to the Company's bylaws and the DGCL).

9. PROTECTIVE PROVISIONS.

So long as the shares of Series A Preferred Stock are outstanding, the Company shall not, take, approve or otherwise ratify any of the following actions without the consent of at least a majority of the then outstanding shares of Series A Preferred Stock:

- (a) authorize, issue or agree to authorize or issue any new class or series of Parity Securities, Senior Securities or securities or rights of any kind convertible into or exercisable or exchangeable for any such Parity Securities or Senior Securities, or offer, sell or issue any Parity Securities, Senior Securities or securities or rights of any kind convertible into or exercisable or exchangeable for any such Parity Securities or Senior Securities;
- (b) purchase, repurchase or redeem shares of (i) Common Stock, (ii) securities or rights of any kind convertible into or exercisable or exchangeable for Common Stock or (iii) other securities of the Company, (except in the case of a termination of an employee, at which the Company may repurchase or redeem such shares of Common Stock at cost and pursuant to any agreement under which such shares of Common Stock were issued);
- (c) increase or decrease the number of members constituting the size of the Board;
- (d) increase the authorized number of shares of Common Stock or Series A Preferred Stock;
- (e) effect any merger, combination, reorganization, or sale of all or substantially all of the Company's assets;
- (f) declare or pay dividends or any other distribution on shares of Common Stock or any other capital stock of the Company except as contemplated herein;
- (g) amend the Certificate of Incorporation or Bylaws of the Company or alter or change the rights, preferences or privileges of the Series A Preferred Stock or any Parity Securities or Senior Securities in each case so as to affect adversely the rights, preferences or privileges of the Series A Preferred Stock; or
- (h) increase from 9,673,082 the number of shares of Common Stock reserved for the employee option pool by more than 5% per year.

In the event holders of at least a majority of the then outstanding shares of Series A Preferred Stock agree to allow the Company to alter or change the rights, preferences or privileges of the shares of Series A Preferred Stock, pursuant to subsection (g) above, so as to affect the Series A Preferred Stock, then the Company will deliver notice of such approved change to the holders of the Series A Preferred Stock that did not agree to such alteration or change (the "DISSENTING HOLDERS") and Dissenting Holders shall have the right for a period of thirty (30) days to convert pursuant to the terms of this Certificate of Designations their shares of Series A Preferred Stock as they existed prior to such alteration or change or continue to hold their shares of Series A Preferred Stock.

10. PREEMPTIVE RIGHT.

(a) The Company shall not issue or sell any shares of Common Stock or securities convertible into or exercisable or exchangeable for shares of Common Stock (the securities issued in such transactions being referred to as the "NEWLY ISSUED Securities"), other than any such issuance or sale (i) which is made pursuant to a public offering pursuant to a registration statement declared effective by the Securities and Exchange Commission, (ii) pursuant to a stock option plan or similar plan or agreement approved by the Board, (iii) in exchange, at fair market value, for assets or equipment to be used by the Company in the ordinary course of business or (iv) pursuant to any of the purchase agreements or the documents executed, filed or delivered in connection therewith, unless prior to the issuance or sale of such Newly Issued Securities each holder of Series A Preferred Stock shall have been given the opportunity (such opportunity being herein referred to as the "PREEMPTIVE RIGHT") to purchase (on the same terms as such Newly Issued Securities are proposed to be sold) the same proportion of such Newly Issued Securities being issued or offered for sale by the Company as (x) the number of shares of Common Stock (calculated solely on account of outstanding Series A Preferred Stock on an as converted basis) held by such holder on the day preceding the date of the Preemptive Notice (as defined below) bears to (y) the total number of shares of Common Stock (calculated on a fully diluted basis with respect to the Series A Preferred Stock and any other Common Stock equivalents which are "in the money") outstanding on the day preceding the date of the Preemptive Notice (as defined below).

(b) At least thirty (30) days prior to the issuance by the Company of any Newly Issued Securities, the Company shall give written notice thereof (the "PREEMPTIVE NOTICE") to each holder of Series A Preferred Stock. The Preemptive Notice shall specify (i) the name and address of the bona fide investor to whom the Company proposes to issue or sell Newly Issued Securities, (ii) the total amount of capital to be raised by the Company pursuant to the issuance or sale of Newly Issued Securities, (iii) the number of such Newly Issued Securities proposed to be issued or sold, (iv) the price and other terms of their proposed issuance or sale, (v) the number of such Newly Issued Securities which such holder is entitled to purchase (determined as provided in subsection (a) above), and (vi) the period during which such holder may elect to purchase such Newly Issued Securities, which period shall extend for at least thirty (30) days following the receipt by such holder of the Preemptive Notice (the "PREEMPTIVE ACCEPTANCE Period"). Each holder of Series A Preferred Stock who desires to purchase Newly Issued Securities shall notify the Company within the Preemptive Acceptance Period of the number of Newly Issued Securities he wishes to purchase, as well as the number, if any, of additional Newly Issued Securities he would be willing to purchase in the event that all of the Newly Issued Securities subject to the Preemptive Right are not subscribed for by the other holders of Series A Preferred Stock.

(c) After the conclusion of the Preemptive Acceptance Period, any Newly Issued Securities which none of the holders elect to purchase in accordance with the provisions of this Section 10, may be sold by the Company, within a period of four (4) months after the expiration of the Preemptive Acceptance Period, to any other person or persons at not less than the price and upon other terms and conditions not less favorable to the Company than those set forth in the Preemptive Notice.

(d) The term "Newly Issued Securities" shall NOT include:

(i) Shares of Common Stock issued upon conversion of shares of Series A Preferred Stock;

(ii) Shares of Common Stock (subject to appropriate adjustment for any stock dividend, stock split, combination or other similar recapitalization affecting such shares) issuable or issued to the Company's employees, directors or consultants pursuant to a stock option plan or restricted stock plan approved by the Board;

(iii) Shares of Common Stock issued or issuable pursuant to subsection 3(d);

(iv) Shares of Common Stock or Preferred Stock issuable upon exercise of options, warrants or upon conversion of convertible securities or other rights outstanding as of the Issuance Date;

(v) Shares of capital stock or options or warrants to purchase capital stock, issued to financial institutions or lessors in connection with commercial credit agreements, equipment financings or similar transactions or to other corporations, persons or entities in connection with acquisitions, mergers or similar business combinations, partnership arrangements, strategic alliances, licensing arrangements or similar non-capital raising transactions approved by the Board; PROVIDED THAT if more than 33% of the currently outstanding shares of capital stock are issued in connection with one or a series of related acquisitions, mergers or similar business combinations, then any shares issued in excess of 33% of the currently outstanding shares of capital stock shall be deemed Additional Shares of Common Stock; PROVIDED, FURTHER, THAT in no event shall the foregoing apply to any issuances to private equity or venture capital firms or any private equity division of any investment bank or commercial bank unless such issuances are made pursuant to contracts or other obligations existing as of the date hereof;

(vi) Shares of Common Stock issued in connection with any stock split, stock dividend or recapitalization of the Company; and

(vii) Securities that are issued by the Company pursuant to a registration statement filed under the Securities Act.

11. NO REISSUANCE OF SERIES A PREFERRED STOCK.

No share or shares of Series A Preferred Stock acquired by the Company by reason of redemption, purchase, conversion or otherwise shall be reissued, and all such shares of Series A

Preferred Stock shall be cancelled, retired and eliminated from the shares of Series A Preferred Stock which the Company shall be authorized to issue. Any such shares of Series A Preferred Stock acquired by the Company shall have the status of authorized and unissued shares of Preferred Stock issuable in undesignated Series and may be redesignated and reissued in any series other than as Series A Preferred Stock.

12. REGISTERED HOLDERS.

A holder of Series A Preferred Stock registered on the Company's stock transfer books as the owner of shares of Series A Preferred Stock shall be treated as the owner of such shares of all purposes. All notices and all payments required to be mailed to a holder of shares of Series A Preferred Stock shall be mailed to such holder's registered address on the Company's stock transfer books, and all dividends and redemption payments to a holder of Series A Preferred Stock made hereunder shall be deemed to be paid in compliance hereof on the date such payments are deposited into the mail addressed to such holder at his registered address on the Company's stock transfer books.

13. CERTAIN REMEDIES.

Any registered holder of shares of Series A Preferred Stock shall be entitled to an injunction or injunctions to prevent breaches of the provisions of this Certificate of Designations and to enforce specifically the terms and provisions of this Certificate of Designations in any court of the United States or any state thereof having jurisdiction, this being in addition to any other remedy to which such holder may be entitled at law or in equity.

14. HEADINGS OF SUBDIVISIONS.

The headings of the various subdivisions hereof are for convenience of reference only and shall not affect the interpretation of any of the provisions hereof.

15. SEVERABILITY OF PROVISIONS.

If any right, preference or limitation of the Series A Preferred Stock set forth herein (as may be amended) from time to time is invalid, unlawful or incapable of being enforced by reason of any rule of law or public policy, such right, preference or limitation (including, without limitation, the dividend rate) shall be enforced to the maximum extent permitted by law and all other rights, preferences and limitations set forth herein (as so amended) which can be given effect without the invalid, unlawful or unenforceable right, preference or limitation herein set forth shall be deemed dependent upon any other such right, preference or limitation unless so expressed herein.

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IN WITNESS WHEREOF, the undersigned, being the Chief Executive Officer of the Company, has executed this Certificate of Designations as of May 7, 2002.

BIOENVISION, INC.

By: /s/ Christopher B. Wood

Name: Dr. Christopher B. Wood
Title: Chief Executive Officer

BIOENVISION INC

345 PARK AVENUE
41ST FLOOR
NEW YORK, NY 10154
212-750-6700

EX-4

EXHIBIT 4
SC 13D Filed on 05/20/2002
File Number 005-78274



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EXHIBIT 4
to SCHEDULE 13D

WARRANT

NEITHER THIS WARRANT NOR THE SECURITIES ISSUABLE UPON EXERCISE HEREOF HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND SUCH SECURITIES MAY NOT BE OFFERED, SOLD, TRANSFERRED, PLEDGED, HYPOTHECATED OR OTHERWISE ASSIGNED UNLESS SO REGISTERED OR AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT IS AVAILABLE. THIS LEGEND SHALL BE ENDORSED UPON ANY WARRANT ISSUED IN EXCHANGE FOR THIS WARRANT.

WARRANT AGREEMENT

FOR COMMON STOCK OF
BIOENVISION, INC.

Warrant No. 1

Date of Issuance: May 7, 2002

Warrant to purchase an aggregate of
3,000,000 shares of Common Stock

THIS CERTIFIES that, for value received, PERSEUS-SOROS BIOPHARMACEUTICAL FUND, LP, or its permitted transferees, successors or assigns (collectively, the "HOLDER"), is entitled to purchase from BIOENVISION, INC., a Delaware corporation (the "COMPANY"), at any time, and from time to time, during the exercise period referred to in Section 1 hereof, Three Million (3,000,000) fully paid, validly issued and nonassessable shares (the "WARRANT SHARES") of common stock of the Company, par value \$0.001 per share (the "COMMON STOCK"), at the exercise price of \$2.00 per share, subject to anti-dilution adjustments as provided herein (the "WARRANT SHARE PRICE"). Securities issuable upon exercise of this Warrant and the exercise price payable therefor are subject to adjustment from time to time as hereinafter set forth. As used herein, the term "Warrant" shall include any warrant or warrants hereafter issued in consequence of the exercise of this Warrant Agreement in part or transfer of this Warrant in whole or in part. Capitalized terms used herein and not defined have the respective meanings given to them in that certain Securities Purchase Agreement, dated the date hereof, by and among the Company, the Holder and the other parties named therein.

The Company shall register this Warrant, upon records to be maintained by the Company for that purpose (the "WARRANT REGISTER"), in the name of the record Holder hereof from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, and the Company shall not be affected by notice to the contrary.

Subject to Section 4 of this Warrant, the Company shall register the transfer of any portion of this Warrant in the Warrant Register, upon surrender of this Warrant, with the Form of Assignment attached hereto duly completed and signed, to the Transfer Agent (as defined herein) or to the Company. Upon any such registration or transfer, a new warrant to purchase Common Stock, in substantially the form of this Warrant (any such new warrant, a "NEW WARRANT"), evidencing the portion of this Warrant so transferred shall be issued to the transferee and a New Warrant evidencing the remaining portion of this Warrant not so transferred, if any, shall be issued to the transferring Holder. The acceptance of the New Warrant by the transferee thereof shall be deemed the acceptance by such transferee of all of the rights and obligations of a holder of a Warrant. Any transfer or assignment of this Warrant and Warrant Shares obtained by the Holder in exercise of this Warrant is subject to the requirements that such securities be registered under the Securities Act and applicable state securities laws or exempt from registration under such laws.

1. EXERCISE; PAYMENT FOR OWNERSHIP INTEREST.

(a) Upon the terms and subject to the conditions set forth herein, this Warrant may be exercised in whole or in part by the Holder hereof at any time, or from time to time, on or after the date hereof and on or prior to 5 p.m. New York local time on May 7, 2007 (the "EXPIRATION DATE"), by presentation and surrender of this Warrant to the principal offices of the Company, or at the office of its Transfer Agent, if any, together with the Purchase Form annexed hereto, duly executed, and accompanied by payment to the Company of an amount equal to the Warrant Share Price multiplied by the number of Warrant Shares as to which this Warrant is then being exercised in U.S. dollars by certified or official bank check or wire transfer of immediately available funds of the cash purchase price; provided, however, that in each case, the minimum number of Warrant Shares as to which this Warrant is being exercised shall be the lesser of (i) 1,000 Warrant Shares or (ii) all Warrant Shares then held by the Holder on an as exercised basis; provided, further, that in the event of any merger, consolidation or sale, lease or transfer of all or substantially all of the assets of the Company, prior to the Expiration Date, the Holder shall have the right to exercise this Warrant commencing at such time through the Expiration Date into the kind and amount of shares of stock and other securities and property (including cash) receivable by a holder of the number of shares of Common Stock into which this Warrant might have been exercisable immediately prior thereto. Any transfer of Warrant Shares obtained by the Holder in exercise of this Warrant is subject to the requirement that such securities be registered under the Securities Act, and applicable state securities laws or exempt from registration under such laws. The Holder of this Warrant shall be deemed to be a stockholder of the Warrant Shares as to which this Warrant is exercised in accordance herewith effective immediately after the close of business on the date on which the Holder shall have delivered to the Company this Warrant in proper form for exercise and payment in U.S. dollars by certified or official bank check or wire transfer of immediately available funds of the cash purchase price for the number of Warrant Shares as to which the exercise is being made, notwithstanding that the stock transfer books of the Company shall be then closed or that certificates representing such Warrant Shares shall not then be physically delivered to the Holder. The Company shall not enter into any merger, consolidation or sale, lease or transfer of all or substantially all of the assets of the Company